

## **REMARKS**

As a preliminary matter, Applicants thank the Examiner for the courtesy shown to Applicants representative, Josh C. Snider, in the telephone interview conducted on April 20, 2004, and for the positive suggestions related to expediting prosecution provided in the outstanding Office Action. Applicants note that the Examiner's comments generally reflect the substance discussed in the telephone interview. Although agreement was not reached in the interview, independent claims 1 and 11 have now been amended mostly along the lines suggested by the Examiner.

Claims 1-3, 5-6, 11-12, and 14-15 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner asserts that the Specification to the present Application does not clearly support the location of the recited compound. Accordingly, independent claims 1 and 11 have been amended to more clearly recite that the recited compound is located between the antiferromagnetic bonding layer and the respective second pinned ferromagnetic layer or second crystalline ferromagnetic layer. Accordingly, Applicants submit that this Section 112 rejection has been overcome by these amendments, and reconsideration and withdrawal of the rejection are therefore respectfully requested.

Additionally, Applicants wish to note that although the Examiner is correct that that "compound" may be a "compound layer" over an entire surface of its underlying film layer, the compound need not form an entire "layer," as is known in the art, but may also exist sparsely over the same surface. Support for these different embodiments may be found on page 18, lines 3-6 of the Specification to the present Application.

Claims 1 and 11 also stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Specifically, the Examiner asserts that the relative locations of the recited interfacial roughnesses are unclear. Accordingly, Applicants have further amended claims 1 and 11 to more clearly define the recited interfacial roughnesses as first and second interfacial roughnesses respectively. Applicants submit that, at least with respect to claim 1, this grammatical clarification alone will overcome the outstanding Section 112, second paragraph, rejection. With respect to claim 11 of the present invention, however, claim 11 has been further amended to additionally identify the respective locations of these first and second interfacial roughnesses. Applicants submit that the rejection of claim 11 has also been overcome by these additional amendments.

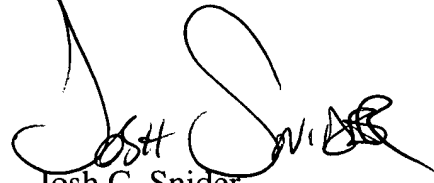
More specifically, claim 11 now more clearly recites that the first interfacial roughness exists between the first crystalline ferromagnetic layer and the antiferromagnetic layer, and that the smaller second interfacial roughness is formed between the second crystalline ferromagnetic layer and the antiferromagnetic bonding layer. Support for these amendments is shown in Fig. 10 of the Specification, for example, and its accompanying description in the first full paragraph on page 18. Applicants respectfully point out that the term “surface” in the Specification is clearly defined throughout the text as meaning the uppermost surface of the respective layers shown in the drawings. Accordingly, Applicants submit that no new matter has been introduced by these amendments.

For all of the foregoing reasons, Applicants submit that this Application, including claims 1-3, 5-6, 11-12, and 14-15, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if a further interview would expedite prosecution.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By

A handwritten signature in black ink, appearing to read "Josh C. Snider", is written over the printed name.

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